

May 12, 2003

**RE: Hydraulic Press Brick Company 109-17263-00007**

TO: Interested Parties / Applicant

FROM: Paul Dubenetzky  
Chief, Permits Branch  
Office of Air Quality

## **Notice of Decision - Approval**

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures

Ira Smith  
Hydraulic Press Brick Company  
P.O. Box 7  
Brooklyn, Indiana 46111

May 12, 2003

Re: 109-17263-00007  
Fourth Administrative Amendment to  
Part 70 109-6835-00007

Dear Mr. Smith:

Hydraulic Press Brick Company was issued a Part 70 operating permit T109-6835-00007 on February 2, 1999 for operation of a stationary shale processing plant producing lightweight expanded shale aggregate. An application to modify the source by adding one (1) new coal storage silo and conveyor that will replace two existing coal storage bins and associated coal handling equipment was received on February 19, 2003. The coal unloading operation is considered to be an insignificant activity pursuant to 326 IAC 2-7-1(21) with an uncontrolled potential to emit of PM of 0.42 tons per year and of PM<sub>10</sub> of 0.15 tons per year, based on 8760 hours per year of operation. Therefore, pursuant to the provisions of 326 IAC 2-7-11(a)(8), the permit is hereby administratively amended as follows (bold language has been added and language with a line through it has been removed):

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]  
[326 IAC 2-7-5(15)]

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This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Paved and unpaved roads and parking lots with public access,
- (b) Other activities or categories not previously identified with emissions below insignificant thresholds:
  - (1) ~~Two~~ **One** coal silos, identified as silos ~~4 and 2~~ **6**;
  - (2) One (1) coal unloading operation, with a maximum capacity of ~~250-280~~ tons of coal per hour, consisting of one (1) dump pit, one (1) hopper for coal unloading, and ~~two (2)~~ **one (1)** conveyors;
  - (3) Four (4) covered silos, identified as silos 3, 4, 5A, and 5B, each with a maximum capacity of 200 tons of raw shale;
  - (4) Three (3) hoppers, identified as HCR6 through HCR8, each with a maximum capacity of 100 tons of raw shale per hour;
  - (5) Two (2) chutes, identified as HCR16 and HCR17, each with a maximum capacity of 100 tons of expanded shale per hour.

All other conditions of the permit shall remain unchanged and in effect.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter please contact Linda Quigley, at 973-575-2555 (ext. 3284) or 1-800-451-6027 press 0 and ask for extension 3-6878.

Sincerely,

Original Signed by Paul Dubenetzky  
Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

LQ/EVP

cc: File - Morgan County  
U.S. EPA, Region V  
Morgan County Health Department  
Air Compliance Section Inspector - Vaughn Ison  
Compliance Data Section - Karen Nowak  
Administrative and Development  
Technical Support and Modeling - Michele Boner

# **PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY**

**Hydraulic Press Brick Company  
Centerton Road  
P.O. Box 7  
Brooklyn, Indiana 46111**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T109-6835-00007	
Issued by: Felicia R. George, Assistant Commissioner Office of Air Management	Issuance Date: February 2, 1999 Expiration Date: February 2, 2004

First Administrative Amendment: 109-10905, issued May 18, 1999

Second Administrative Amendment: 109-11189, issued December 7, 1999

Third Administrative Amendment: 109-16747, issued December 26, 2002

Fourth Administrative Amendment: 109-17263-00007	
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Page affected: 6 Issuance Date: May 12, 2003

- (1) one (1) primary haydite crusher, identified as HCR1, with a maximum capacity of 100 tons of expanded shale per hour,
  - (2) one (1) secondary haydite crusher, identified as HCR2, with a maximum capacity of 100 tons of expanded shale per hour,
  - (3) three (3) screens, identified as HCR3 through HCR5, each with a maximum capacity of 100 tons of expanded shale per hour, and
  - (4) seven (7) conveyors, identified as HCR9 through HCR15, each with a maximum capacity of 100 tons of expanded shale per hour, and
- (f) One (1) reciprocating grate clinker cooler, identified as CLNKCOOL, with a maximum capacity of 40 tons of expanded shale per hour, using a multiclone as control, and exhausting to stack ST2.
- (g) One (1) expanded shale aggregate crusher line, identified as ESA, with a maximum capacity of 30 tons of expanded shale per hour and consisting of the following equipment:
- (1) one (1) expanded shale aggregate crusher, identified as ESA 1, utilizing a baghouse as particulate control, with a maximum capacity of 30 tons of expanded shale per hour and exhausting through stack ST6,
  - (2) one (1) screen, identified as ESA 2, utilizing a baghouse as particulate control, with a maximum capacity of 30 tons of expanded shale per hour and exhausting through stack ST6, and
  - (3) five (5) conveyors, identified as ESA 3 through ESA 7, each with a maximum capacity of 30 tons of expanded shale per hour, utilizing a water spray system on the feed conveyor as particulate control and exhausting fugitively.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]  
[326 IAC 2-7-5(15)]

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This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Paved and unpaved roads and parking lots with public access,
- (b) Other activities or categories not previously identified with emissions below insignificant thresholds:
  - (1) One coal silo, identified as silo 6;
  - (2) One (1) coal unloading operation, with a maximum capacity of 280 tons of coal per hour, consisting of one (1) dump pit, one (1) hopper for coal unloading, and one (1) conveyor;
  - (3) Four (4) covered silos, identified as silos 3, 4, 5A, and 5B, each with a maximum capacity of 200 tons of raw shale;
  - (4) Three (3) hoppers, identified as HCR6 through HCR8, each with a maximum capacity of 100 tons of raw shale per hour;
  - (5) Two (2) chutes, identified as HCR16 and HCR17, each with a maximum capacity of 100 tons of expanded shale per hour.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

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This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

### Appendix A: Emission Calculations

Company Name: Hydraulic Press Brick Company  
 Address City IN Zip: P.O. Box 7, Brooklyn, In 46111  
 MSOP: 109-17263  
 Plt ID: 109-00007  
 Reviewer: Walter Habeeb  
 Date: March 28, 2003

#### Emissions from Coal Handling

Section 13.2.4 of AP-42 contains emissions factors for Aggregate Handling and Storage Piles. The formula for estimating particulate matter and PM10 emissions from transfer points is:

$$E = k * (0.0032) * [(U/5)^{1.3} / ((M/2)^{1.4})] \quad \text{Where:}$$

E = emission factor in lb/ton of material transferred.

k = particulate size multiplier (dimensionless). k = 1.0 for particulate matter and 0.35 for particulate matter less than 10 um.

U = mean wind speed, miles per hour. Assume 10 mph for central Indiana.

M = material moisture content (%) = 4.5 from Table 13.2.4-1 of AP-42 for coal (as received).

For Particulate Matter

$$E = (1.0) * (0.0032) * [(10.0 / 5)^{1.3} / ((4.5 / 2)^{1.4})] = 0.00233 \text{ lb/ ton}$$

For PM<sub>10</sub>

$$E = (0.35) * (0.0032) * [(10.0 / 5)^{1.3} / ((4.5 / 2)^{1.4})] = 0.000858 \text{ lb/ ton}$$

Hydraulic Press Brick has three shale kilns each with a maximum heat input capacity of 100 mmBtu per hour. Heat input of coal used is 11,000 Btu/ lb. Therefore:

$$\text{Maximum combustion rate} = \frac{100 \text{ mmBtu /hr} * 1 \text{ ton} * 8760 \text{ hr /yr}}{11,000 \text{ Btu/lb} * 2000 \text{ lb}} = 39,770 \text{ ton / yr}$$

$$\text{For all three units} = 3 * 39,770 \text{ ton /yr} = 119,311 \text{ ton / yr}$$

Total Emissions ( there are three transfer points):

$$\text{Particulate Matter} = \frac{119,311 \text{ ton / yr} * 3 * 0.00233 \text{ lb / ton}}{2000 \text{ lb / ton}} = 0.42 \text{ tons / yr}$$

$$\text{PM}_{10} = \frac{119,311 \text{ ton / yr} * 3 * 0.000858 \text{ lb / ton}}{2000 \text{ lb / ton}} = 0.15 \text{ tons / yr}$$